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D1* 45. (Thrice Amended) An isolated nucleic acid as in claim 41 wherein said expression vector encodes at least a functional domain of an hcAMP-GEFII protein having the amino acid sequence of SEQ ID NO: 18, wherein said functional domain of the hcAMP-GEFII protein exhibits guanine nucleotide exchange factor activity in an *in vitro* assay.

D2 50. (Thrice Amended) A host cell in culture, said host cell comprising an expression vector of any one of claims 41-47, or a descendant thereof, wherein said host cell is transformed *in vitro* with said expression vector.

D3 62. (Amended) A method for producing at least a functional domain of an hcAMP-GEFII protein (SEQ ID NO: 18), said method comprising culturing a host cell of any of claims 50-54 under suitable conditions to produce said protein by expressing said nucleic acid, wherein said functional domain exhibits guanine nucleotide exchange factor activity in an *in vitro* assay.

Basis for Amendments

Claims 2, 4-7, 9, 11, 38, 39 and 48-49 have been cancelled without prejudice and without the intention of abandoning the subject matter claimed therein. Indeed, Applicants may choose to pursue claims of the same scope, or narrower or broader scope, in the form of one or more related applications at a later date.

Claim 45 has been amended to recite an isolated nucleic acid as in claim 41 in which the expression vector encodes at least a functional domain of an hcAMP-GEFII protein having the amino acid sequence of SEQ ID NO: 18 and wherein the hcAMP-GEFII protein exhibits guanine nucleotide exchange factor activity in an *in vitro* assay. This amendment is supported in the claim 45 as originally filed.

Claim 50 has been amended to correct dependency.

Claim 62 has been amended to recite that the claimed functional domain exhibits guanine nucleotide exchange factor activity in an *in vitro* assay. That amendment is supported in the specification at page 21, lines 10 and 11 and in Example 2, starting on page 52.